Understanding cross-regional variation in the effect of remittances on development outcomes

Undergraduate Research Thesis

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by

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Abstract

It is well-established in the literature that money being sent home by family members and relatives living away from home, i.e. remittances, can help combat poverty and contribute to economic development across the developing world. There is also consensus that remittances to households in low-income countries are growing rapidly and have even outpaced official aid. However, there is still much to be said about why remittances play a larger role in development for certain countries or regions than others. This project explores why there appears to be large cross-regional variation in the impacts of remittances on development outcomes. I begin by providing a comprehensive review of the existing literature to better understand the motivating factors behind remittances. I continue with a discussion of how characteristics of specific countries and regions influence these motivating factors and contribute to any observed variation in the development outcomes of remittances. From this discussion, I identify key factors affecting the apparent variation in distribution and development impacts of remittances across developing countries. Finally, I present recommendations for future research and development policy implications of my analysis.

1. Introduction

It is well-established in the literature that money being sent home by family members and relatives living away from home, i.e. remittances, can help combat poverty and contribute to economic development across the developing world (Acosta et. al. 2006; Anyanwu and Erhijakpor, 2010; Zhu and Luo, 2010; Combes et. al., 2014). There is also consensus that remittances to households in developing countries are growing rapidly and have even outpaced official aid (World Bank, 2016). However, there is still much to be said about what motivates households to engage in migration and why remittances play a larger role in economic development for certain countries and regions rather than others.

The existing literature points to a variety of factors that influence a household to send a migrant to work elsewhere and the uses of remittances received from the migrant worker. For example, Rosenzweig (1988) found that households in rural India with few endowed assets, such as land, relied more heavily upon local credit markets relative to interfamilial transfers to ease liquidity constraints. However, Zhu and Luo (2010) found that rural households in the Hubei province of China with greater land resources relative to labor power are less likely to send a migrant abroad due to the greater opportunity cost of doing so relative to lower-income households with greater labor power relative to land resources. The variation in findings from studies such as these raises a series of important, and challenging, questions: Who sends a migrant abroad to earn remittances? Why do certain households send a migrant away and others do not? How do remittances shape development outcomes, and how do those outcomes influence household decisions to engage in migration? Although this paper certainly does not present conclusive answers to these questions, it seeks to begin a conversation around each of them to encourage further exploration of the relationship between remittances and economic development.

This paper explores why there appears to be large variation across counties, regions, and sectors in the impacts of remittances on economic development and how this variation influences the decisions of households to engage in migration and utilize remittances[1]. I begin with a

[1] 1 Throughout this paper, the remittances describe transfers from a migrant working and residing in a different city or country than the rest of the household to send money back to the household. The migrant's household is referred to as the recipient household, and the migrant's country of origin is referred to as the resident country. The term host country is used when referring to country in which the migrant is working.

discussion of how households determine the utility of migration by considering factors such as risk exposure, potential consumption-smoothing effects from remittances, potential easing of

liquidity constraints, and the transaction costs associated with migration. This discussion draws upon a variety of studies to identify trends and differences in how households weigh these factors in making the decision to engage in migration. Following this discussion, I examine changes in poverty levels, income inequality, and education attributed to remittances to assess the development outcomes of remittances. These outcomes result from household decisions to engage in migration, but they also shape household expectations, whether within the same household or other households in the same village, about the utility of migration. Finally, I seek to understand how this household decision-making process shapes, and is shaped by, conditions that differ across different countries and regions. I examine data from the World Bank (2016) on official remittance inflows to developing countries and identify trends and economic conditions that are likely to affect household decisions to engage in migration. Although many more questions arise from this analysis than answers, the overall goal is to present a holistic overview of why households in developing countries engage in migration and why these decisions result in an uneven distribution of remittances across different regions.

The remainder of the paper is organized as follows: Section 2 reviews the relevant literature concerning factors that influence the decision to migrate and remit, as well as the development impacts of remittances Section 3 presents my analysis of the cross-regional characteristics that are likely to influence household decisions to migrate and variation in the distribution and development outcomes of remittances. Section 4 presents recommendations for how policymakers and researchers can assess the impacts of remittances on economic development and explore whether they are the best mechanism for facilitating such development. Section 5 concludes.

2. Review of relevant literature

2.1. Factors influencing the decision to migrate and remit

Due to the endogenous relationship between migration and remittances, it is critical to examine how the relationships between remittances and factors such as risk, transaction costs, and development outcomes shape, and are shaped by, the decision to migrate and the subsequent flows of remittances. When households make the decision to send a migrant abroad, they have certain expectations about how remittances from that migrant will affect the risks and liquidity constraints the household faces. Households also have expectations about the transaction costs associated with migration and how they may be able to smooth consumption using income from remittances. The combination of these expectations is the utility the household expects to receive from migration and remittances. This utility must be larger than the utility of the household without migration for the household to engage in migration. When households engage in migration, the subsequent development outcomes that result from actual remittance inflows also shape future expectations about the utility of migration and remittances. Whether the development outcomes that result from remittances are positive or negative for the recipient household and/or its local community, they inform expectations about how more remittances in the future will continue to affect remittance recipients.

2.1.1. Risk and Remittances

There is strong support in the literature for the risk-mitigating effects of remittances on recipient households. The three main risk-mitigating strategies employed by households receiving remittances are consumption smoothing, easing liquidity constraints, and diversification of risk. First, recipient households that engage in consumption smoothing are expected to have a more stable income at their disposal from remittances that allows them to stabilize consumption. These households certainly smooth consumption whenever possible based upon their non-migration income, but shocks such as drought, floods, or sudden unemployment may force them to use less desirable means to smooth consumption, like selling an asset, when income from remittances is not available. This is particularly salient in rural settings where households are the most vulnerable to natural disasters and price shocks. Second, remittances to recipient households may also ease liquidity constraints, providing or freeing capital for the recipient household to invest in businesses or other non-migratory members of the household. Such investments may take the form of a new capital-intensive technology for an enterprise owned by a member of the household or longer and more stable schooling for non-migrant members of the household. Finally, remittances also serve as a risk diversification strategy for both the migrant and the recipient household throughout the migration and remittance process. This is particularly important for rural households which primarily rely upon agriculture, as they are exposed to systemic risks such as droughts, floods, and other natural disasters that can devastate the household’s income. By sending a migrant to another place to work in an industry that is not affected by those same shocks, the household diversifies the risks it is exposed to and creates a new income stream that can be relied upon if another fails due to a shock.

Households receiving remittances may engage in one or a combination of these three strategies through a variety of mechanisms. The household may regard remittances as an increase in disposable income which it uses to purchase goods for consumption in local markets. Consumption smoothing behaviors by the remittance-receiving household may have positive spillover effects in easing liquidity constraints on other local enterprises. Increased and/or more consistent consumption by the remittance-receiving household provides local enterprises a larger and/or more stable income through more reliable and/or increased purchases of goods and services. These spillover effects may therefore free capital for the local enterprise to invest back into improving its business. The remittance-receiving household may utilize remittances to directly ease liquidity constraints it faces, treating remittances as a substitute for formal credit or savings. Remittances provide or free capital for the household to invest in its remaining members (i.e. via increased schooling and education expenditures for children) and/or its own enterprise (i.e. adopting a new farming technology, starting or increasing the capacity of a small business). The household may invest remittances directly in its enterprise, or it may invest its own capital and regard remittances as a "safety-net" in the case that the new venture fails. Finally, households may utilize migration and remittances as a risk-diversification strategy by intentionally sending one or more migrants to work in industries that are not positively correlated with the primary industry the household relies upon. For example, a rural household which engages in farming may send a migrant member to work in an urban center so the migrant's income is not affected by adverse agricultural conditions, such as heavy rains or drought. Table 1 provides a summary of the literature discussing the relationship between remittances and each of the three main risk-mitigating strategies employed by recipient households of remittances. The relevant literature for each strategy is discussed in-depth in the following sub-sections.

Table 1: Discussion of the relationship between remittances and risk					
Papers	**Country**	**Method**	**Liquidity Constraints**	**Risk Diversification**	**Consumption Smoothing**
Woodruff and Zenteno (2006)	Mexico	Empirical analysis of impact of attachment to migration networks on urban microenterprises	Migration is associated with higher investment levels and higher profits, but not higher sales		
Stark and Lucas (1988)	Botswana	Empirical analysis of implications of self-enforcing contractual arrangement between migrant and household		Rural households send a migrant to the urban sector to work as insurance to adopt riskier agricultural strategies	
Rozelle, Taylor and deBrauw (1999)	China	Empirical analysis of relationships between migration, remittances, and agricultural productivity	Short-term decreases in household crop yields partially compensated for by increased access to remittances		
Lucas and Stark (1985)	Botswana	Empirical analysis of motivations for migrants to remit		Migration Pareto-superior when migrants working in sectors where outcomes not highly positively correlated	
Giuliano and Ruiz-Arranz (2008)	Cross-country	Empirical analysis of the relationship between remittances and growth	Remittances increase growth in countries with less-developed financial sectors		
Bugamelli and Paterno (2009)	Cross-country	Empirical analysis of effects of migrants' remittances on output growth volatility			Remittances reduce output growth volatility through consumption-smoothing
Taylor and Wyatt (1996)	Mexico	Empirical analysis of effects of remittances on household-farm income	Remittances from family members working abroad relieve household credit constraints		
Halliday (2006)	El Salvador	Empirical analysis of relationship between idiosyncratic economic shocks and migration to the U.S.		Rural households more likely to utilize migration as an *ex post* response to an agricultural shock; less likely in response to earthquakes	
Brown (1997)	Tonga and Western Samoa	Empirical analysis of determinants of remittances and responsiveness to policy interventions	Remittances serve as a source of loanable funds for investment by recipient households		Remittances have a consumption-smoothing effect for recipient households
Yang (2008)	Philippines	Empirical analysis of effects of exchange rate shocks on remittances	Appreciation of migrant currency leads to increased investment in non-consumption areas		Appreciation of migrant currency did not lead to significant consumption-smoothing effect
Rosenzweig (1988)	India	Empirical analysis of household risk-mitigation through consumption smoothing	Increases in interfamilial transfer income lead to a reduction in household's borrowing from the local credit market		Households that lack land ownership rely more heavily on formal credit markets to smooth consumption

2.1.2. Consumption Smoothing

Several empirical studies (Rosenzweig 1988; Brown, 1997; Bugamelli and Paterno, 2009) find a significant relationship between remittances and household consumption smoothing. Rosenzweig (1988) conducted an empirical analysis using longitudinal household survey data for nine consecutive cropping years from households engaged in agricultural production across six villages in India. This study found that interfamilial transfer schemes play a particularly important role in smoothing consumption for recipient households of remittances (Rosenzweig, 1988) However, Rosenzweig (1988) also found that households which lack land ownership – which is the main indicator of wealth for the areas involved in the survey – rely much more heavily on formal credit markets relative to remittances from migrants to smooth consumption than wealthy households. This suggests there are resource constraints on migration, negatively impacting the ability of poorer households to send a migrant abroad and remit. Brown (1997) conducted an empirical analysis utilizing survey data collected from Tongan and Western Samoan migrants residing in Sydney, Australia to estimate the determinants of remittances and their responsiveness to policy interventions. Like Rosenzweig (1988), Brown found that remittances had a positive consumption-smoothing effect among recipient households. Brown (1997) observed that among Tongan and Western Samoan migrants, migrants and households make the migration and remittance decision together and act as co-insurers against the risks incurred at different stages in that process under the assumption that both will see returns on their investment in the migration of a member of the household. Bugamelli and Paterno (2009) also found a positive consumption smoothing effect from remittances in an empirical analysis using cross-country data from 60 emerging and developing economies to determine the effects of migrants' remittances on output growth volatility. In fact, Bugamelli and Paterno (2009) attributed the relationship they found between increases in remittances and subsequent decreases in output growth volatility in the survey countries primarily to the consumption-smoothing effects of remittances at the household level. However, some studies found no significant effect of remittances on consumption smoothing. Yang (2008) conducted an empirical analysis utilizing national household survey data on Filipino migrants to determine the effects of the appreciation of some migrants' host country currency against the Philippine peso during the Asian Financial Crisis of 1997 on outcomes in remittance-recipient households. No significant consumption smoothing effect among households was observed in this study, but the positive shock produced significant increases in non-consumption investments for households that saw an increase in the value of their remittance receipts (Yang, 2008). These findings demonstrate that household priorities and subsequent choices play a crucial role in how remittances are allocated within the household and in the local economy.

2.1.3. Easing Liquidity Constraints

Many studies have found that remittances ease liquidity constraints for recipient households (Rosenzweig, 1988; Taylor and Wyatt, 1996; Brown, 1997; Rozelle, Taylor and deBrauw, 1999; Woodruff and Zenteno, 2006; Giuliano and Ruiz-Arranz, 2008; Yang, 2008). Based upon data from rural households in India, Rosenzweig (1988) found interfamilial transfers have a lower cost than formal debt contracts and observed that increases in transfer income to a household lead to a reduction in that household's borrowing from the local credit market. Rosenzweig (1988) also found the availability of credit in local markets depends upon the overall economic performance (regarded as income in this study) of the village, but interfamilial transfers do not. This observation demonstrates how remittances may allow households to overcome liquidity constraints imposed by local economic conditions, such as negative fluctuations in the aggregate income of the local village. In an empirical analysis using annual data on remittances from 73 developing countries over the period 1975-2002 to determine the relationship between remittances and economic growth, Giuliano and Ruiz-Arranz (2008) also found that remittances help households overcome liquidity constraints imposed by local economic conditions. While Rosenzweig (1988) focused on how households utilized interfamilial transfers to lower the cost of borrowing from formal credit markets for specific villages, Giuliano and Ruiz-Arranz (2008) looked at how remittances help households overcome poor or absent credit markets. Giuliano and Ruiz-Arranz (2008) found remittances increase growth in countries with less-developed financial sectors because they help households overcome liquidity constraints and offer an alternative way to finance investments outside the formal financial sector.

In an empirical study using longitudinal data from household-farms in rural Mexico to determine effects of remittances on household-farm income, Taylor and Wyatt (1996) also found that remittances relieved credit constraints on recipient households, indirectly increasing household income. Rozelle, Taylor and deBrauw (1999) conducted an empirical analysis using household survey data from 787 farm households from 31 villages in the Hubei and Liaoning provinces to analyze the relationships between migration, remittances, and agricultural productivity. This study found that, specifically in cases of rural-to-urban migration, remittances may both insure the recipient household against risk and ease liquidity constraints for the household to adopt new agricultural production methods or technologies. However, migration of a member of the household was associated with decreased household crop yields in the short term, with remittances compensating, at least in part, for this short-term loss by providing capital for investment in agricultural production (Rozelle, Taylor and deBrauw, 1999). Remittances may also provide capital for investment in small enterprises in urban areas of developing countries. Woodruff and Zenteno (2006) conducted an empirical analysis using survey data from of more than 6,000 self-employed workers and small-firm owners in 44 areas of urban Mexico to estimate the impact of attachment to migration networks on the level of capital investment, the capital-output ratio, sales, and profits of microenterprises. Woodruff and Zenteno (2006) found that migration networks played a key role in alleviating capital constraints for enterprises in high-capital sectors in Mexico. Migration was associated with higher capital investment levels and higher profits, but not higher sales for the microenterprises surveyed. Based upon the results from Rozelle, Taylor and deBrauw (1999) and Woodruff and Zenteno (2006), migration and remittances appear to have positive effects on both rural and urban enterprises through easing liquidity constraints, but those gains may not be realized in the short-term.

Brown (1997) and Yang (2008) also found that remittances ease liquidity constraints for households to invest in their non-migrant members and enterprises. Brown (1997) found that remittances from Western Samoan and Tongan migrants residing in Sydney, Australia served as sources of loanable funds for recipient households. Yang (2008) found that Filipino household which experienced a positive shock due to the appreciation of migrants' host country currency against the Philippine peso during the 1997 Asian Financial Crisis invested remittances in household enterprises, increased child schooling, and increased education expenditures. Remittances ease liquidity constraints on recipient households and free capital for investment, many times in a household enterprise. However, as Yang (2008) found, the capital made available to households through remittances may also be invested directly into non-migrant members of the household in the form of increased educational expenditures. The flexibility provided by remittances for the household to make these choices about how to invest newly available capital may not be available in local, formal credit contract options. By providing this flexibility and lowering the cost of borrowing for households, remittances ease liquidity constraints and allow for larger investments in priority areas for recipient households.

2.1.4. Risk Diversification

Migration and remittances may also serve as an *ex ante* (Lucas and Stark, 1985; Stark and Lucas, 1988) or *ex post* (Halliday, 2006) risk-diversification strategy. Lucas and Stark (1985) conducted an empirical analysis using household survey data from the National Migration Study of Botswana for the period 1978-1979 to construct a model of motivations for migrants to remit. They found that allocating certain members of the household as migrants may serve as a Pareto-superior strategy for the household as a whole, benefitting both the migrant and the household more than the no-migration alternative (Lucas and Stark, 1985). One potential gain from this strategy is risk-diversification, achieved by migrants working in sectors whose outcomes are not highly positively correlated to that of the primary sector the household relies upon for income (Lucas and Stark, 1985). This is therefore an *ex ante* strategy, as it seeks to mitigate the risk of a negative shock to the household's primary source of income by sending a member to work in a different sector. Stark and Lucas (1988) found a similar result in their empirical analysis using data from the National Migration Survey (NMS) conducted in Botswana in the period 1978-1979 to examine the implications of a self-enforcing contractual arrangement between the member of the rural household who migrates to an urban area and the rest of the household. They found rural households send a migrant to the urban sector to work as insurance for potential negative outcomes from undertaking riskier agricultural strategies at home (Stark and Lucas, 1988). Like Lucas and Stark (1985), Stark and Lucas (1988) found that migration and remittances were utilized by households as an *ex ante* strategy to diversify risk in the event of an exogenous shock. However, Stark and Lucas (1988) observed households utilizing migration as a form of insurance in case a risky undertaking produced a poor result or an exogenous shock occurred. The study found rural households that possessed assets which are sensitive to drought over the survey period, during which a drought occurred, received greater remittances from migrants working in the urban sector during the drought than rural households possessing fewer drought-sensitive assets (Stark and Lucas, 1988). In this situation, the increased remittance inflows to the household effectively acted like an informal insurance policy that guaranteed a payout to the households even in the adverse agricultural conditions of a drought

While Lucas and Stark (1985) and Stark and Lucas (1988) focus on the use of migration and remittances as an *ex ante* strategy for diversifying risk, Halliday (2006) focuses on how migration and remittances function as an *ex post* strategy to mitigate risk. Halliday (2006) conducted an empirical analysis of panel data collected from rural households in El Salvador in the years 1997, 1999 and 2001 to examine the relationship between idiosyncratic economic shocks in El Salvador and migration to the United States. The study found rural households are more likely to utilize migration as an *ex post* strategy to respond to an agricultural shock than they would be in the absence of the shock (Halliday, 2006) As discussed in Stark and Lucas (1988), it appears the asset-susceptibility of rural households to an agricultural shock affects the household's decision to send a migrant to another sector, but as an *ex post* strategy. However, a disaster such as an earthquake disrupts many assets at once, and Halliday (2006) found earthquakes constrained migration rather than encouraging it to respond to the shock. This finding suggests migration may be the most successful as a strategy for mitigating risk, whether *ex ante* or *ex post*, for exogenous shocks that affect specific types of assets than those that may have detrimental effects across several categories of assets at once.

2.2. Transaction costs of migration and remittances

The literature discusses the influence of transaction costs of both migration and remittances on the household's decision to send a migrant abroad and the subsequent impacts of remittances. The three main categories of transaction costs that affect migrants in this situation are the costs of obtaining information regarding migration, the costs of physically migrating to another country, and the costs of sending remittances back to the recipient household in the resident country. Since there is no guarantee the migrant will make it to the destination country or find more lucrative opportunities than those available in the resident country, the household must carefully weigh the risks and transaction costs of migration against the anticipated benefits of remittances. Table 2 provides a summary of the literature discussing transaction costs, with the following sub-sections expanding upon the literature for specific categories of transaction costs.

Table 2: Discussion of transaction costs of migration and remittances

Papers	Country	Method	Migration Costs	Remittance Costs	Information Costs
Singh (2010)	India	Empirical analysis of how transaction costs and payment structures for sending remittances affect variation in the amount of remittances sent back to the recipient household		Over the medium- and long-term, transaction costs are the most dominant variable in explaining variation in remittances	
Rosenzweig (1988)	India	Empirical analysis of household risk-mitigation through consumption smoothing	Households with few endowed assets (i.e. land) rely more heavily on formal credit relative to interfamilial transfers than wealthier households		Rural households face greater transaction costs related to obtaining information about migration than their urban counterparts
Anyanwu and Erhijakpor (2010)	Cross-country	Empirical analysis of impact of remittances on poverty in Africa		High transaction costs of transferring remittances from the migrant to recipient household restrict flows of remittances to African countries	
Stark, Taylor and Yitzhaki (1986)	Mexico	Empirical analysis of the effects of remittances on village income inequality			Information costs are highest to the first households to send a migrant abroad, but positive spillover effects from these households lowers the long-term cost of information for all households in the village
Zhu and Luo (2010)	China	Theoretical analysis of a counterfactual income distribution in the absence of migration and remittances to identify the effects of rural-to-urban migration on rural poverty and income inequality	Households with greater labor power relative to land resources are more likely to participate in migration due to their opportunity costs of migration being lower		
Halliday (2006)	El Salvador	Empirical analysis of relationship between idiosyncratic economic shocks in El Salvador and migration to the United States	Migration is liquidity constrained, so wealthier households are more likely than those with lower income to migrate.		

2.2.1. Information costs

Costs of obtaining information regarding migration opportunities are impacted by proximity and access to information networks (Stark, Taylor and Yitzhaki, 1986; Rosenzweig, 1988). Rosenzweig (1988) found that rural households across six villages in India faced greater transaction costs related to obtaining information about migration than their urban counterparts. Due to the more remote locations of these households, they faced greater challenges in obtaining information that is more accessible in urban centers. Stark, Taylor and Yitzhaki (1986) also found challenges to accessing information for rural households in Mexico, but they examined how those challenges differ across households within rural villages. They conducted an empirical analysis of household data collected from two Mexican villages to determine the effects of remittances on village income inequality (Stark, Taylor and Yitzhaki.1986). The study found that once high-income households in the village obtained information to successfully send a migrant abroad, those households effectively lowered the transaction costs of information regarding migration for lower-income households in their community by sharing their experiences with others.

2.2.2. Migration costs

The literature is mixed on how households successfully overcome or are constrained by migration costs, which include both the risk of the migrant's failure and the physical costs of the migrant's travel to another country. Rosenzweig (1988) found that households in rural India with few endowed assets (i.e. land) rely more heavily on formal credit relative to interfamilial transfers than wealthier households that are better able to self-insure against the risks of migration due to their ability to accumulate wealth and assets. This suggests that wealthier households can pay the costs of migration and thus reap more benefits in the form of remittances by doing so than their less wealthy counterparts. However, given the fact remittances ease liquidity constraints on the recipient household, they may reduce the need to migrate and reliance upon local credit markets simultaneously. Halliday (2006) also found that migration was liquidity constrained among rural households in El Salvador, where wealthier households were more likely to send a migrant abroad than their lower income counterparts in response to agricultural shocks. However, Halliday (2006) found that the exogenous shock of an earthquake disrupted migration across all income levels, suggesting that shocks like earthquakes with wide-spread negative effects can raise the risks and costs of migration to an insurmountable level for all income levels.

Contrary to Rosenzweig (1988) and Halliday (2006), Zhu and Luo (2010) found that lower-income rural households in China, proxied by their ratio of labor power to land were more likely to engage in migration than higher-income households. Zhu and Luo (2010) conducted an empirical analysis using a survey from 1,208 rural households across 42 villages in the Hubei province of China to identify the effects of rural-to-urban migration on rural poverty and income inequality. They simulated a counterfactual income distribution in the absence of migration, treating remittances as a substitute for household income, and compared it to the observed income distribution in the survey data from households which had engaged in migration (Zhu and Luo, 2010). The study found households with greater labor power relative to land resources, which are generally lower income households, are more likely to participate in migration due to their opportunity costs of migration being lower than households with greater land resources relative to labor power (Zhu and Luo, 2010). This result indicates that, at least in the case of the villages studied, lower opportunity costs of giving up a unit of labor from the household allowed lower-income households to overcome this migration cost more easily than higher-income counterparts in the same village. It also shines light on the difficulty of weighing migration costs in making the decision to send a migrant abroad, as these costs can take the form of both opportunity costs and the physical costs of travel.

2.2.3. Transaction costs of sending remittances to the household

The transaction costs of migrants sending money back to their households play a key role in the decision to migrate and the impacts of remittances (Anyanwu and Erhijakpor, 2010; Singh 2010). Each of these papers find that decreasing the costs of sending remittances back to a migrant's resident country would increase the amount of remittances being sent to households in the resident country. Anyanwu and Erhijakpor (2010) conducted an empirical analysis of panel data from poverty surveys collected from 33 countries in both North Africa and Sub-Saharan Africa beginning in 1990 to determine the impact of remittances on poverty in Africa. They found that the high transaction costs of transferring remittances from migrants to recipient households are restricting the flow of remittances to African countries, and they recommend taking policy action to decrease these costs (Anyanwu and Erhijakpor, 2010). Singh (2010) conducted an empirical analysis of how transaction costs and payment structures for sending remittances from a host country back to India affect variation in the amount of remittances sent back to the recipient household. The study found that over the medium- and long-term, transaction costs are the most dominant variable in explaining variation in the amounts of remittances sent to households (Singh, 2010). In the short to medium term, payment infrastructure explains about 10 percent of variation in remittances, while exchange rates explain about 6-9 percent over the medium term, although this impact diminishes over the long term

(Singh, 2010). Singh (2010) found transaction costs for sending small amounts of money remain high due to the high overhead cost associated with small transfers. The variation in such overhead costs from country to country is a critical reason for variation in both the volume of remittances sent to the country, as Singh mentions, as well as the impacts those remittances can have on local economies.

2.3. Development outcomes attributed to remittances

Given the steady increase in flows of remittances to low-income countries, it is important to examine the development outcomes that may be attributed to remittances. These outcomes are likely to affect household expectations about the utility of migration, therefore contributing to the household's decision to send a migrant abroad. The three development indicators that emerge from the literature as the most relevant to remittances are poverty, income inequality, and education. It is important to note that education in this context is referring to the child schooling and educational expenditures within the recipient household, not just the educational opportunities potentially sought out by the migrant abroad. While it is important to consider all three development indicators together to construct the most accurate representation of how remittances impact development, Table 3 demonstrates that there is a significant amount of variation in the literature regarding how remittances impact these indicators.

Table 3: Development outcomes from remittances					
Papers	**Country**	**Method**	**Poverty**	**Income Inequality**	**Education**
Anyanwu and Erhijakpor (2010)	Cross-country	Empirical analysis of impact of remittances on poverty in Africa	Remittances have a statistically significant effect on reducing poverty in African countries		
Stark, Taylor and Yitzhaki (1986)	Mexico	Empirical analysis of the effects of remittances on village income inequality		Migration and remittances increased income inequality in the short run, but spillover effects resulted in a long-term decrease in income inequality	
Acosta et. al. (2006)	Cross-country	Meta-analysis of patterns of remittances to households and the effects of remittances on poverty and income inequality	Remittances significantly reduce the number of people in poverty in Latin America and the Caribbean	Remittances do not have a significant effect on reducing income inequality in Latin America and the Caribbean	
Barham and Boucher (1998)	Nicaragua	Theoretical analysis using a no-migration counterfactual model		Migration and remittances increase income inequality when compared with the no-migration counterfactual.	
Combes et. al. (2014)	Cross-country	Empirical analysis of the impact of remittances on the prevalence of working poor	The level of remittance flows has a negative and significant effect on the prevalence of working poor		
Lucas and Stark (1985)	Botswana	Empirical analysis of motivations for migrants to remit.			Family investment in schooling of younger members who migrate yields greater remittances than when migrants possess less education
Taylor and Wyatt (1996)	Mexico	Empirical analysis of impact of remittances on relieving household-farm credit and risk constraints		Remittances have equalizing effect on income, dependent upon initial asset holdings and access to remittances	
Yang (2008)	Philippines	Empirical analysis of effects of positive exchange rate shocks from the Asian Financial Crisis of 1997 on households receiving remittances			Households which experienced an increase in resources due to appreciation of a migrant's currency invested more resources in child schooling and educational expenditures
Zhu and Luo (2010)	China	Theoretical analysis of a counterfactual income distribution in the absence of migration and remittances to identify the effects of rural-to-urban migration on rural poverty and income inequality	Migration and remittances reduce poverty for rural households, raising the income of rural households to a greater degree than that of rich households also receiving remittances	Migration income tends to reduce income inequality in by allowing households with low marginal labor productivity in the rural sector to increase income through migration to the urban sector.	

2.3.1. Poverty

Among the three development indicators presented here, there appears to be the most support for remittances leading to a decrease in poverty in low-income regions (Acosta et. al., 2006;Anyanwu and Erhijakpor,2010; Zhu and Luo, 2010; Combes et. al.,2014) Zhu and Luo (2010) found that, in the case of the Hubei province of China, migration and remittances reduce poverty for rural households, raising the income of rural households to a greater degree than that of rich households also receiving remittances. This suggests the income-raising effects of remittances are larger for lower-income households than relatively higher-income households. Lower-income households receive a larger marginal utility for every additional dollar earned than relatively higher-income households which are already able to meet certain needs that their lower-income counterparts cannot without the additional income from remittances.

A series of regional analyses also found poverty-reducing effects of remittances. In an empirical analysis of panel data from poverty surveys collected from 33 countries in both North Africa and Sub-Saharan Africa beginning in 1990, Anyanwu and Erhijakpor (2010) found that a 10 percent increase in official international remittances as a share of Gross Domestic Product (GDP) results in a 2.9 percent decrease in the share of people living in poverty. Acosta et. al. (2006) conducted a meta-analysis of patterns of remittances to households and the effects of remittances on poverty and income inequality using Balance of Payments (BOP) statistics and Latin American Household Surveys from ten countries. The study found that remittances reduce the number of people in poverty in Latin America (Acosta et. al., 2006). Combes et. al. (2014) conducted an empirical analysis using data assembled by the International Labor Organization (ILO) from 100 countries from 1990-2010 on the prevalence of working poor, defined as individuals earning less than US$2 per day, to determine the impact of remittances on the prevalence of working poor in developing countries. The study found the level of remittance flows has a negative and significant effect on the prevalence of working poor, even after controlling for the unpredictability of remittances (Combes et. al., 2014). The range of countries and regions covered by these studies suggests that remittances have a significant effect on reducing poverty across developing countries.

2.3.2. Income inequality

There appears to be the most disagreement in the literature regarding whether remittances reduce or increase income inequality. Two studies of countries conducted in Central and South America found that remittances increase income inequality within a village (Stark, Taylor and Yitzhaki, 1986; Barham and Boucher, 1998). Stark, Taylor and Yitzhaki (1986) found that remittances increase income inequality in the short-term before the positive spillover effects of information sharing from the first few households that send a migrant abroad leads to a long-term reduction in income inequality. In an empirical analysis of migration and remittance data collected in Bluefields, Nicaragua in 1991, Barham and Boucher (1998) found migration and remittances increase income inequality among households in Bluefields when compared with the no-migration counterfactual. On a regional scale, Acosta et. al. (2006) found remittances do not have a significant effect on reducing income inequality across countries in Central and South America. It appears that the length of time over which remittances are received heavily contributes to whether they increase or reduce income inequality across households. However, there does not appear to be consensus that remittances always increase or decrease income inequality, or that they have any effect on income inequality

However, two studies found that remittances may reduce income inequality specifically among rural households (Taylor and Wyatt, 1996; Zhu and Luo, 2010). Taylor and Wyatt (1996) conducted an empirical analysis of longitudinal household-farm data from Mexico in which they found remittances may have an equalizing effect on income for low-to-middle income household-farms. However, the study found that the potential equalizing effect of remittances among rural households depends upon the initial asset holdings of the household-farm and its access to migrant remittances. In a study of rural households in the Hubei province of China, Zhu and Luo (2010) examined the effects of remittances on rural income inequality by offering a counterfactual of household earnings without migration, in which the migrant would have earned some wage that is substituted by remittances in the case of migration. They found remittances from specifically rural-to-urban migration to reduce income inequality among rural households by giving households with low marginal labor productivity in the rural sector the opportunity to increase income through migration to the urban sector (Zhu and Luo, 2010). These studies suggest that remittances may reduce income inequality among rural households, but they do not point to significant equalizing effects between households in both the urban and rural sectors.

2.3.3. Education

Two studies referenced here found that remittances resulted in more years of schooling (Lucas and Stark, 1985) and higher educational expenditures (Yang, 2008) for members of the household. In their study utilizing migrant household survey data from Botswana, Lucas and Stark (1985) found that family investment in the schooling of younger members who then migrate and remit back the family yields greater remittances than other families whose migrants possess less education. This drove households to invest in the education of younger members so they could successfully migrate and remit in the future, benefitting the household as a form of risk diversification and the migrant with more lucrative labor opportunities than those available at home (Lucas and Stark, 1985). In a study of the Philippines, Yang (2008) found that remittances were directly invested into increased child schooling and educational expenditures. The length of time children within the household were kept in school also increased in response to remittances and child labor decreased (Yang, 2008). Both studies suggest that remittances benefit both the migrant and the household through increased investment in education and level of education attainment for members of the household.

3. Analysis of regional differences affecting remittances

The World Bank (2016) uses the International Monetary Fund (IMF) definition of personal remittances, which are primarily composed of “personal transfers” and “compensation of employees.” The IMF definition also considers “capital transfers between households” to be a component of personal remittances, but few countries report this data (World Bank, 2016). It is important to note that “personal transfers” include money or in-kind transfers from the migrant to any household in their home country, not just family members (World Bank, 2016). Furthermore, a migrant worker’s income is considered “compensation of employees” if the migrant is working in another country for less than a year (World Bank, 2016). Many countries still report migrant worker’s income as “compensation of employees” after the migrant has been working in the country for a year or longer because they classify workers according to citizenship rather than residency, which breaks from the IMF residency guidelines (World Bank, 2016). Although the World Bank uses the IMF definition of remittances, it collects and reports data from countries that may not report on all the components of the IMF definition of what constitutes remittances.

The World Bank estimates that worldwide official remittance flows in 2015 were greater than $601 billion, of which an estimated $441 billion, which is nearly three times official development assistance, was directed to developing countries (World Bank, 2016). However, these flows are not distributed evenly across developing countries. This uneven distribution is attributed to regional differences that influence both the decisions of households to send a migrant abroad to remit and the subsequent impacts of remittances on recipient households. The following section aims to provide a better understanding of why there may be variation in remittance inflows between and within regions. The regions referred to below are based upon the World Bank's analytical regions and only include the developing countries within each region (World Bank, 2016)[2]. The change in official inflows of remittances to each region from 2006-2015 are displayed in Figure 1.

[2] 1. The attached Appendix lists the countries included in each of the World Bank analytical regions.

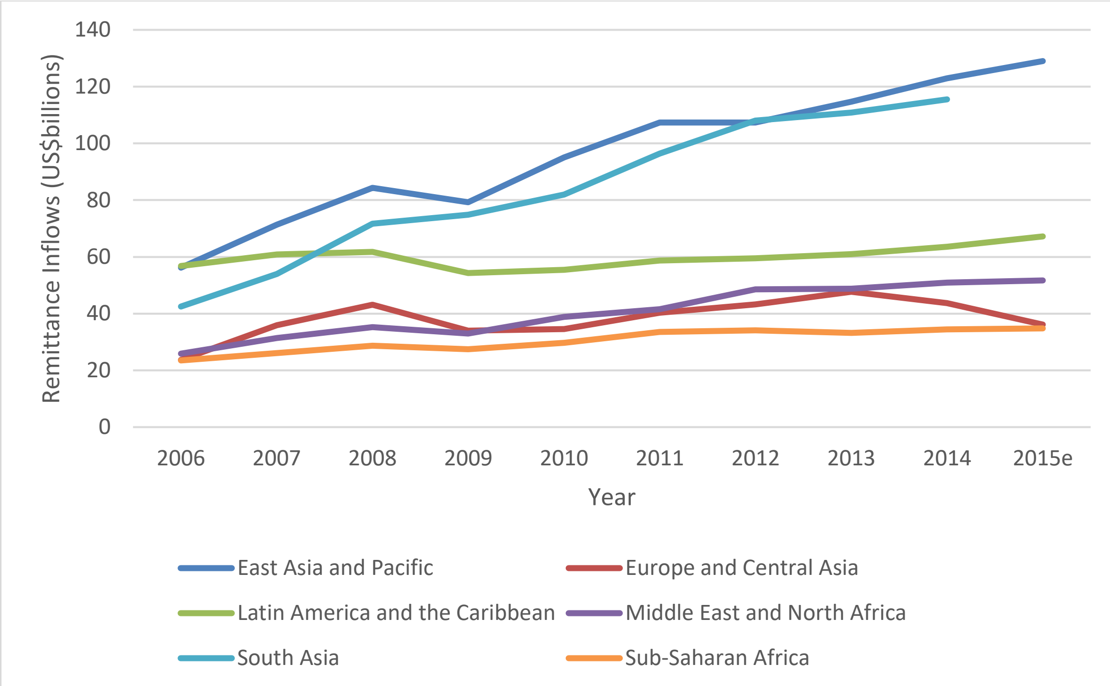

Figure 1: Official remittance inflows from 2006-2015e. Adapted from World Bank (2016). *Migration and Remittances Factbook 2016*, 3rd edition. Washington, DC: World Bank. This is an adaptation of an original work by The World Bank. Views and opinions expressed in the adaptation are the sole responsibility of the author or authors of the adaptation and are not endorsed by The World Bank.
Note: Data reported for 2015 are estimated remittance inflows, and The World Bank does not report a 2015 estimate for South Asia.

While the East Asia and Pacific region and the South Asia region have seen large growth in official remittance inflows since 2006, the other four regions have seen much smaller growth in official inflows. Sub-Saharan Africa particularly stands out, as it has the lowest inflows of remittances out of any region and relatively stagnant growth in those inflows over this period. This may be attributed to several factors, including migration patterns and their associated risks, transaction costs of sending money back to households within this region, and geographic distance from high-income countries. The potential effects of these factors on household decisions to engage in migration will be explored in greater detail. To offer context as to the regional impact of remittances, Figure 2 presents the percentage of regional Gross National Income (GNI) made up by remittances.

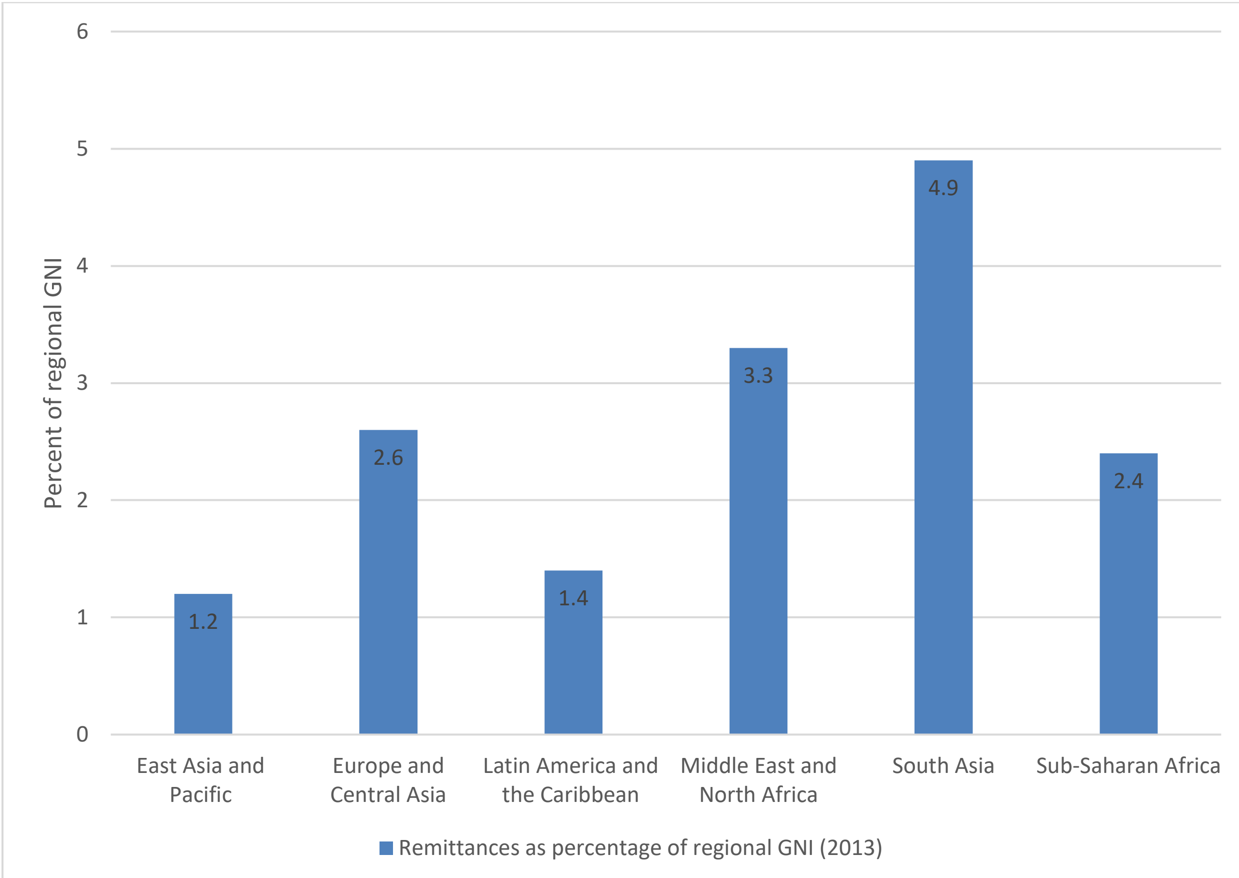

Figure 2: Remittances as a percentage of regional GNI (2013). Adapted from World Bank (2016). *Migration and Remittances Factbook 2016*, 3rd edition. Washington, DC: World Bank. This is an adaptation of an original work by The World Bank. Views and opinions expressed in the adaptation are the sole responsibility of the author or authors of the adaptation and are not endorsed by The World Bank.

South Asia appears to benefit the most from remittances as a region, with official inflows accounting for 4.9 percent of regional GNI in 2013, but remittances to the East Asia and Pacific region made up only 1.2 percent of regional GNI in 2013, the lowest for any region (World Bank, 2016). Considering these two regions receive the greatest volume of remittance inflows, this difference in the impact of remittances on regional GNI may demonstrate that official inflows do not provide the full story about the utility of remittances to households in different regions. The following sub-sections offer a closer look at specific characteristics of regions and the countries within these regions that are likely to influence household decisions to migrate and the flow of remittances back to households.

3.1. Geographic proximity to high-income areas

Geographic proximity to promising business centers (i.e. cities) and/or high-income OECD and non-OECD countries is likely to shape household expectations about the utility of migration and subsequent migration patterns to these areas. Since the top source countries of remittances are high-income countries, households in regions and sub-regions that are furthest removed from such countries, such as many of those in Sub-Saharan Africa, are at a disadvantage in tapping into these large remittance flows. Migration is largely intra-regional within Sub-Saharan Africa, with 65.6 percent of emigrants moving to destination countries within the region in 2013 (World Bank, 2016). These households face larger transaction costs relative to households in other regions to obtain information about high-income destination countries and to physically send the migrant such a far distance. The World Bank (2016) found that it costs 19 percent to send $200 from South Africa to Zambia. For comparison, the average cost of transferring remittances worldwide was 8 percent in the third quarter of 2015 (World Bank, 2016). Although there are certainly informal and private remittance channels that may allow migrants to avoid these costs, the high cost of transferring remittances back to the resident household is a deterrent for households making the decision to send a migrant abroad to remit.

These high transaction costs may contribute to the relative strength of intraregional migration corridors compared to those outside of the region that is observed in Sub-Saharan Africa. Households likely expect to be exposed to fewer risks and/or incur fewer transaction costs related to migration in sending a migrant to an area they are familiar with, such as another country within the same region. However, in the case where most nearby countries and/or locations of employment opportunities are very similar in terms of potential earnings for the migrant, engaging in migration may not produce significant growth in remittance inflows to recipient households.

Latin America and the Caribbean benefit from access to the largest migration corridor in the world, that of the United States and Mexico, in terms of remittance inflows (World Bank, 2016). However, Mexico, Central America, and the Caribbean see greater inflows of remittances, and subsequently rely upon them more heavily, than most countries in South America. It is important to note that although this part of the overall region may benefit from reduced transaction costs associated with migration to a high-income OECD country, there are still higher levels of poverty within this part of the region than South America (World Bank, 2017). One potential explanation of this is the relatively more diverse economic base for countries within South America than those located in the northern sub-regions of the overall region. Furthermore, households in remote regions of countries which are close to high-income countries may still face significant barriers associated with obtaining information about migration and mobilizing the resources necessary to send a migrant abroad. As such, even large inflows of remittances to certain parts of a region still may not reach the households that are most in need of them.

Despite the low number of emigrants as a portion of the population, the East Asia and Pacific Island region has achieved huge inflows of remittances. One potential explanation for the large inflows is the high number of emigrants traveling to high-income OECD countries and high-income non-OECD countries. In 2013, 45.9 percent of emigrants from this region migrated to high-income OECD countries and 29.2 percent migrated to high-income non-OECD countries, accounting for just over 75 percent of total emigration from the East Asia and Pacific Island region (World Bank, 2016). The greater economic prospects posed by countries in the middle- and high-income categories to emigrants likely raises household expectations about the utility of migration, especially for households with access to information about migration to such countries.

Most emigration from Europe and Central Asia in 2013 occurred to high-income OECD and high-income non-OECD countries, accounting for more than 82 percent of emigration from the region combined (World Bank, 2016). There is a clear divide in the migratory patterns between the eastern and western sub-regions of Europe and Central Asia. Migration within the eastern sub-region appears heavily tied to Russia, with five out of the top ten migration corridors for the whole region in 2013 consisting of corridors between a country in the eastern part of the region and Russia (World Bank, 2016). Four out of the remaining five corridors that made up the top ten migration corridors for the larger region in 2013 consisted of west-to-west migration between a country within the western sub-region and another middle- or high-income country in the western sub-region and/or European Union (World Bank, 2016). The economic conditions within the eastern and western sub-regions reflect countries' strong ties to other countries within their same sub-region, as well as the western sub-region's advantageous ties to high- and middle-income countries in the EU. These ties are likely to shape household expectations about the benefits and risks associated with migration.

The Middle East and North Africa is unique in the fact it had the most balanced distribution of migration destinations in 2013 relative to other regions. Migration to high-income OECD countries accounted for 37.7 percent, migration to high-income non-OECD countries accounted for 27.7 percent, and intra-regional migration destinations accounted for 30.9 percent of total migration destinations (World Bank, 2016). This may be attributed to the centralized location of the countries within this region providing greater access to high-income OECD and non-OECD countries, as well as middle-income countries within the region.

3.2. Narrow economic base

Remittances are a significant contribution to the GDPs of the Pacific Island economies in the East Asia and Pacific region. Seven out of the top ten countries in the East Asia and Pacific region that received the largest inflows of remittances as a share of GDP in 2014 were Pacific Island countries (World Bank, 2016). When examining the distribution of remittances in this region, it is important to keep the relative size of economies in mind because much smaller inflows to the Pacific Islands than Eastern Asia still have a significant impact of the island countries. However, within this region, the Pacific Islands are particularly vulnerable to exogenous shocks that may or may not be mitigated by remittances. The economies of these countries rely upon a narrow base of export commodities in the agricultural sector (World Bank, 2017), making them highly vulnerable to fluctuations in commodity prices and natural disasters.

Remittances may play a role in mitigating some of these risks *ex ante* and *ex post* for households in the Pacific Islands, but the cost of sending remittances to the Pacific Islands, which are the highest in the world alongside Sub-Saharan Africa, poses a significant barrier to this strategy (World Bank, 2016). According to the World Bank (2016), it costs more than 20 percent to send $200 from Australia to Vanuatu. Furthermore, the remote location of these islands contributes to the costs of remitting as well as the cost of migration. The top ten corridors for the East Asia and Pacific region do not directly include the countries within the Pacific Islands, suggesting the transaction costs of obtaining information and physically migrating may be higher for households in these countries than those in the East Asia portion of the region. However, the small size of the island economies allows smaller remittance flows to still have a significant impact on country GDPs, particularly when juxtaposed to the stagnating effect similar barriers in Sub-Saharan Africa exert over the flow and impact of remittances to developing countries in that region.

As previously mentioned, remittance flows also appear to play a large role in countries within Central America and the Caribbean. In 2014, nine out of the top ten remittance recipient countries as a percentage of GDP for Latin America and the Caribbean were in these two sub-regions (World Bank, 2016). The only country from South America within the top ten, Guyana, is also a small economy, and remittance inflows accounted for 10.6 percent of its GDP in 2014 (World Bank, 2016). Overall, the larger impact remittances have on smaller economies within Latin America and the Caribbean reflects the global trend in remittances accounting for the greatest shares of GDP in small countries. However, many of these countries also rely upon a narrow export-commodity economic base, and shocks to this base (i.e. price shocks, natural disasters) may not be fully overcome through remittances. The persisting higher poverty levels in Latin America and the Caribbean relative to South America further demonstrate that significant inflows of remittances as a share of country GDP do not guarantee impoverished individuals are benefitting from remittances.

Developing countries within Sub-Saharan Africa are particularly vulnerable to exogenous shocks, particularly those which effect oil and agriculture, due to their reliance on a relatively narrow base of export-commodities. In 2016, the slowdown in economic growth for the region largely came from shocks in South Africa and oil-exporting countries, which produce two-thirds of the entire region’s output (World Bank, 2017). South Africa suffered a significant contraction in economic growth due to declining oil and commodity prices and droughts related to El Niño that decreased agricultural production in both southern and eastern areas of the region (World Bank, 2017). However, the decrease in oil prices benefitted certain agricultural producers in both western and eastern parts of the region that were not affected by drought, which enjoyed robust growth in agricultural export products in 2016 (World Bank, 2017). Although certain parts of this region benefitted from conditions that hurt other regions, the overall impact of declining oil prices was detrimental to economic growth for the entire region. Since most migration in Sub-Saharan Africa is intraregional, it is difficult for households to escape negative economic conditions such as these, even if they do participate in migration. This narrow economic base built upon export-commodities is vulnerable to shocks, making households working in some of the most lucrative industries within this narrow base vulnerable to disruptions in income from such shocks.

Within South Asia, Nepal stands out as a relatively small country that heavily relies upon remittances. Remittance inflows accounted for 29.2 percent of GDP in Nepal in 2014, making it the third largest recipient country of remittances as a percent of GDP in the world (World Bank, 2016). The World Bank (2017) projects Nepal will reach an estimated 5.0 percent in economic growth by July 2017, but the country has experienced a slowdown in the growth of remittances from migrants working in oil-exporting countries that has weighed on consumption and investment. The slowing growth of remittances to Nepal is a significant development due to the country's heavy dependence upon remittance inflows. However, recent favorable agricultural and trade developments, as well as accelerated earthquake reconstruction activities, are driving the strong economic growth in the country (World Bank, 2017). These developments point towards economic diversification, which is likely to reduce reliance upon remittance inflows.

The case of Nepal demonstrates how local economic opportunities can protect countries that display significant dependence on remittance inflows from negative shocks in host countries where migrants are working.

3.3. Economic disruption from armed conflict and refugee crises

The Middle East and North Africa region and Sub-Saharan Africa have both experienced exceptionally detrimental economic effects from armed conflicts and subsequent refugee crises. The conflicts in Syria and Yemen, as well as Iraq's struggle against the Islamic State (ISIS) and political crisis in Libya have all had negative impacts on macroeconomic conditions in these respective countries and the Middle East and North Africa region (World Bank, 2017). Tourism has particularly suffered across various countries, including Egypt, due to terrorism, and armed conflicts have disrupted other industries through the direct destruction of infrastructure and mass displacement of refugees (World Bank, 2017). The Middle East and North Africa had the largest number of refugees out of any region in 2014 (World Bank, 2016). In addition to the negative economic impact of the fall in oil prices, the ongoing humanitarian crisis posed by the mass displacement of people further strains household resources of those directly displaced by armed conflict and government resources for security and humanitarian assistance. It is likely the humanitarian crisis is also having a negative impact on remittances to the region, whether by restricting household opportunities to send a migrant abroad to remit, disruption of infrastructure used to transfer remittances into the region, and/or lowering remittance flows due to economic downturns in high-income oil-exporting destination countries.

Political instability has also played a significant role in destabilizing economic growth throughout Sub-Saharan Africa. In addition to the direct impacts of political tension on major economies in the region, such as attacks on oil pipelines in Nigeria and tension in South Africa (World Bank, 2017), the refugee crisis produced by civil conflicts throughout the region has displaced massive numbers of people throughout the region. Although these individuals certainly account for the migration patterns in the region in recent years, the circumstances of their migration are more likely to hinder rather than encourage the growth in remittances to the region. Furthermore, expectations about the dangers of travel or the separation of members of the household during a time of conflict may outweigh the potential utility a household expects to gain from remittances.

4. Policy implications and recommendations

The preceding section provided an analysis of how geographic proximity to high-income areas, size and make-up of economies, and conflict across and within regions of developing countries may shape the conditions under which households make the decision to send a migrant abroad to remit. Following this analysis, several policy implications emerge for how to create conditions conducive to lowering the costs and risks associated with migration. However, this analysis also raises questions about whether remittances are the best mechanism for facilitating economic development, particularly among the poorest households in developing countries.

Lowering the transaction costs of sending remittances back to the migrant's household is an important step towards improving conditions for migration and remittances, especially for households in the Pacific Island sub-region of the East Asia and Pacific Island region and Sub-Saharan Africa. This may be accomplished via several channels. Combes et. al. (2014) suggests that stimulating competition in the remittances market between service providers (i.e. banks and money transfer organizations) is a key area for policymakers to address to drive down the transaction costs for transferring remittances internationally. Combes et. al. (2014) also suggests that improving the legal framework for remittances and facilitating greater access to financial services are both strategies that can also drive down transaction costs of remittances.

I agree that these are policy changes policymakers in both host countries for migrant workers and remittance-recipient countries should explore. However, these strategies are most likely to help those households which already engage in migration and receive remittances. The underlying issues of access to formal financial services and high overhead costs for transferring small amounts of money to households in the most remote geographic locations must be addressed before remittances may reach some of the poorest households in the world. Furthermore, making formal financial services more widely available in remote, impoverished areas may alleviate the need for households to seek out remittances to diversify risk, ease liquidity constraints or smooth consumption. This may in fact be a more desirable development tool, as facilitating these strategies for risk-mitigation locally is likely to be more accessible to a greater number of low-income households than remittances.

Economic diversification at the local, national, and regional levels is also critical to ensuring economic growth, and this is cannot be accomplished solely through remittances. Reliance upon a narrow base of commodity exports for economic growth makes both local and national economies susceptible to shocks in commodity prices. Such shocks in turn are likely to discourage migration or disrupt remittance flows and/or their uses depending upon whether a shock affects the recipient household, the migrant's work industry, or both at the same time. This is particularly important for small economies which rely heavily upon remittances as a portion of GDP due to the severe consequences that could occur if a shock disrupts both the national economy and a large number of migrants' work industries.

Overall, further empirical research is needed to assess local impacts of remittances in geographically remote regions, especially in rural Sub-Saharan Africa, Central America and the Caribbean, and the Pacific Islands. It is also critical to explore the impacts of remittances on economic development outcomes for low-income households in developing countries relative to other interventions, such as making banking and insurance services more accessible on the local level. Such comparative studies could be a significant contribution to the literature, as they could facilitate a direct comparison of development mechanisms for a specific population to assess the relative effectiveness of these mechanisms.

5. Conclusion

The goal of this paper is to shed more light on the influence of regional differences over the impacts of remittances and how development policy must account for these differences when seeking to utilize remittances as a tool for development. The economic conditions and opportunities to migrate and remit differ across developing countries, both within the same region and across different regions. The second half of this paper focuses attention on these differences and how they may constrain or amplify the flows of remittances to different countries and regions. More research is needed in this area before development policies that intend to harness remittances as a mechanism for economic development are implemented. It is critical to recognize that remittances may be a powerful economic development tool for certain countries and regions, but there is still much to be researched regarding the conditions under which they can be harnessed as such, particularly in geographically remote areas and countries where official remittance inflows remain exceptionally low.

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Appendix

i. World Bank (2016) analytical regions

Region: East Asia and Pacific (developing countries only: 24)
Countries: American Samoa, Cambodia, China, Fiji, Indonesia, Kiribati, Democratic Republic of Korea, Lao People's Democratic Republic, Malaysia, Marshall Islands, Federated States of Micronesia, Mongolia, Myanmar, Palau, Papua New Guinea, The Philippines, Samoa, Solomon Islands, Thailand, Timor-Leste, Tonga, Tuvalu, Vanuatu, Vietnam

Region: Europe and Central Asia (developing countries only: 20)
Countries: Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Georgia, Kazakhstan, Kosovo, the Kyrgyz Republic, Former Yugoslav Republic of Macedonia, Moldova, Montenegro, Romania, Serbia, Tajikistan, Turkey, Turkmenistan, Ukraine, Uzbekistan

Region: Latin America and the Caribbean (developing countries only: 24)
Countries: Belize, Plurinational State of Bolivia, Brazil, Colombia, Costa Rica, Cuba, Dominica, Dominican Republic, Ecuador, El Salvador, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, St. Lucia, St. Vincent and the Grenadines, Suriname

Region: Middle East and North Africa (developing countries only: 13)
Countries: Algeria, Djibouti, Arab Republic of Egypt, Islamic Republic of Iran, Iraq, Jordan, Lebanon, Libya, Morocco, Syrian Arab Republic, Tunisia, West Bank and Gaza, Republic of Yemen

Region: South Asia (developing countries only: 8)
Countries: Afghanistan, Bangladesh, Nepal, Bhutan, India, Maldives, Pakistan, Sri Lanka

Region: Sub-Saharan Africa (developing countries only: 46)
Countries: Angola, Benin, Botswana, Burkina Faso, Burundi, Cabo Verde, Cameroon, Central African Republic, Chad, Comoros, Democratic Republic of Congo, Republic of Congo, Côte d'Ivoire, Eritrea, Ethiopia, The Gambia, Gabon, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mauritius, Mozambique, Namibia, Niger, Nigeria, Rwanda, São Tomé and Príncipe, Senegal, Sierra Leone, Somalia, South Africa, South Sudan, Sudan, Swaziland, Tanzania, Togo, Uganda, Zambia, Zimbabwe